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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,647	07/30/2003	Junya Yoneda	239534US0CONT	6857
22850 7590 10/05/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER SOROUSH, LAYLA	
			ART UNIT 1617	PAPER NUMBER
			NOTIFICATION DATE 10/05/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/629,647

Applicant(s)

YONEDA ET AL.

Examiner

Layla Soroush

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-20, 22-25 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-20, 22-25 and 28 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 27, 2007 has been entered.

See rejections below:

Claim Objections

Claim 30 is objected to as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-17, 20, 22-25, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgstiner (WO 98/18491) in view of Moretti (WO 97/05862 – previously presented), Meisner (US Pat No. 4,772,591– previously presented) and Bryan (6,274,612).

Burgstiner teaches a composition and dietary supplementation (p 21 lines 5-15) comprising thymic-derived factors and enzymatic co-factors, wherein the thymic-derived factors can be thymus extract, thymus enzymatic polypeptide factors, thymosin, thymopoietin and thymic humoral factor and the enzymatic co-factors can be vitamins A, C, D, E, B-1, B-2, B-6, B-12, minerals, amino acids which can be arginine, cysteine, histidine, L-ornithine, L-isoleucine, L-leucine, threonine, tyrosine, L-valine, phenylalanine and methionine. The reference teaches treatment autoimmune disease inclusive of rheumatoid arthritis in a subject comprising administering to the subject the compositions of the present invention (page 33, claim 10, 15, and 16). The composition can be formulated into any type of dosing system, such as a tablet, captab, in liquid or injections for topical transdermal, oral, rectal, or parenteral routes (page 24, line 5-20).

Moretti is solely incorporated to show that the oral or parenteral administration of the amino acid ornithine in the treatment of inflammatory bowel disease, hepato-splenomegaly associated with inflammatory disease, rheumatoid arthritis, and connective tissue disease (inflammatory diseases) (see claims 1,2,4,12-14, and 15; p. 9-11).

Meisner is solely incorporated to show that an amino acid used in a composition to treat tissue degenerative inflammations and inflammatory diseases is valine (branched amino acid) (column 4, lines 42-60). Exemplary inflammatory diseases include osteoarthritis. The composition is administered topically and orally (column 6, lines 15 and 40). In the oral form, the substance mixture is formulated into

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pharmaceutically acceptable dosage forms such as powders, tablets, or capsules (see column 6, lines 45-49).

Bryan is solely incorporated to show that a method of administering an amino acid protocol at least one essential amino acid such as Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Threonine, Tryptophan and Valine (col. 8, claims 1-3) is useful in treating an autoimmune disease inclusive of rheumatoid arthritis in a patient suffering therefrom.

Claims 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgstiner (WO 98/18491) in view of Moretti (WO 97/05862 – previously presented), Meisner (US Pat No. 4,772,591—previously presented) and Bryan (6,274,612) as applied to claims 14-17, 20, 22-25, 28 above, and further in view of Fischer et al. (US Pat. No. 3,950,529—previously presented) and Ansel et al. (Pharmaceutical Dosage Forms and Drug Delivery Systems 7th Edition p 227—previously presented).

Burgstiner, Moretti et al., Meisner and Bryan is as discussed above.

Burgstiner, Moretti et al., Meisner and Bryan fail to teach ornithine and a branched amino acids in a food or a drink.

Fischer teaches an amino acid formulation comprised of isoleucine, leucine, and valine formulated for intravenous or oral administration (see abstract). For oral consumption, the amino acid mixture, are made into edible food preparations in the form of palatable liquid drinks or semisolid foods.

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Additionally, Ansel et al. teaches, "solid dosage forms are best taken with a glassful of water or a beverage. Further, the reference teaches an ordinary tablet crushed or a capsule opened helps "facilitate ease of administration, any unpleasant drug taste may be masked by mixing with custards, yogurt, rice pudding, other soft food, or fruit juice (p. 227, column 2, paragraph 5)."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to administer ornithine and branched amino acids with a food or drink because Morreti et al. teaches amino acid compositions comprising leucine, isoleucine, and valine incorporated with food preparations. The motivation to administer ornithine and branched amino acids with a food or drink is because Ansel et al. teaches that for ease of administration and avoidance of unpleasant tastes drugs may be administered with various foods and drinks. Therefore, a skilled artisan would have reasonable expectation of success in incorporating ornithine and branched amino acids with a food or drink.

Response to Arguments

Applicant's arguments filed on June 27, 2007 have been fully considered.

Claims 14 and 22 have been amended, and claim 30 has been added. Claims 14-20, 22-28, and 30 are herein acted on the merits.

Applicant's arguments over the 35 U.S.C. 112 rejections of claims 22-29 is persuasive due to amendments made to claims. Therefore, the rejection is herewith withdrawn.

Applicant's arguments over the 35 U.S.C. 103 (a) rejection of claims 14-17, 20

over Moretti (WO 97/05862) and Meisner (US Pat No. 4,772,591) is persuasive due to amendments made to claims. Therefore, the rejection is herewith withdrawn.

Applicant's arguments over the 35 U.S.C. 103 (a) rejection of claims 18 and 19 over and Meisner (US Pat No. 4,772,591) and further in view of Fischer et al. (US Pat. No. 3,950,529) and Ansel et al. (Pharmaceutical Dosage Forms and Drug Delivery Systems 7th Edition p 227) is persuasive due to amendments made to claims. Therefore, the rejection is herewith withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Soroush whose telephone number is (571)272-5008. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Wang
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